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Variability of X-ray pulsars in a hard energy band observed with INTEGRAL

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Abstract

We present the first results of the observations of the X-ray pulsars LMC X-4, 4U0352+309 and EXO1722-363 performed with the INTEGRAL observatory. The LMC X-4 was investigated during the whole superorbital cycle (~30 days) and it was found that its period was not stable at this time scale. We detected a variable X-ray flux (18-60 keV) from the pulsar EXO1722-363, which could be connected with the orbital motion in the binary system. A more accurate position and the estimate of the orbital period for this source are reported. We also investigated a hard X-ray spectrum of 4U0352+309 (X Persei) measured with INTEGRAL and report the detection of the cyclotron absorption line at about 29 keV.

Keywords

Neutron stars, X-ray pulsars